

REMARKS

Claims 1-8 are pending. Claims 1 and 8 are amended. New claim 9 is added.

OBVIOUSNESS-TYPE DOUBLE PATENTING REJECTION

The Applicants note the rejection of claims 1-8 under the judicially created doctrine of obviousness-type double patenting over claims 1-24 of U.S. Patent No. 6,200,134 (which is a parent application of this application) and also over claims 1-42 of U.S. Patent No. 6,692,251 (which is also a parent application of this application). The Applicants are amenable to filing a terminal disclaimer covering both the '153 patent and the '251 patent, which are co-owned with the present application.

Currently, claim amendments are made in the rejected pending claims and new claim 9 is added for consideration upon re-examination of the pending claims. If the application, upon re-examination, appears otherwise in an allowable form, the Examiner is certainly encouraged to telephone the undersigned, who will then immediately file the suitable terminal disclaimer.

SECTION 102 REJECTION

Claims 1-4 and 6-7 are rejected under 35 U.S.C. §102(b) over the reference of Kennedy (U.S. Patent No. 5,420,768).

Independent claim 1 has been amended to more distinctly recite the invention, and to distinctly recite that the dies each include at least one generally bare semiconductor junction as disclosed in the application, and particularly discussed on page 16, and mounted in a collective array. A continuous, clear lens layer is recited having at least one curved surface and contacting the array to extend in a continuous

fashion over all the dies of the array for protecting the bare semiconductor junctions and directing and focusing the light generated by the array. As shown in Figure 3 of Kennedy, and discussed in the parent case, the LEDs utilized by Kennedy are traditional LEDs, which are generally somewhat bullet-shaped and include their own separate packages, such as reflectors and small microlenses. Accordingly, the Kennedy '768 reference does not teach the light-emitting die elements which each include at least one bare junction and are mounted in an array as recited in claim 1. Furthermore, the element 16 in Kennedy '768 called out by the Examiner as a protective cap is essentially a dust cap, and also provides a way for mounting the light guide 17. As shown in Figure 1, the cap element does not teach a continuous, clear lens layer having at least one curved surface, and contacts the array which not only protects the bare semiconductor junctions but also directs and focuses light generated by the array. There is no such teaching of directing and focusing the light as claimed. Accordingly, the Kennedy '768 reference cannot anticipate pending claim 1 under §102(b) because it does not teach each and every element as recited in that claim.

Claim 8 has been further amended to recite the light-emitting dies including generally bare semiconductor junctions wherein a continuous, clear layer having at least one curved surface contacts the array in which the dies are mounted and extends in a continuous fashion over the dies for protecting the bare semiconductor junctions and directing and focusing light generated by the array. Accordingly, claim 8 is also not anticipated by the Kennedy '768 reference for the reasons discussed above.

New claim 9 recites "a plurality of light-emitting elements formed from generally bare light-generating semiconductor junctions mounted on a substrate." Claim 9 also

recites a continuous lens layer having at least one surface thereon and contacting the substrate to extend in a continuous fashion over all the light-emitting elements.

For the reasons discussed above with respect to claims 1 and 8, claim 9 also recites elements that are not taught by the Kennedy '768 reference, and thus claim 9 is not anticipated under §102(b) by that reference. Furthermore, claims 2-4 and 6-7 depend from claim 1 and recites unique combination of elements making them also allowable over the cited art.

Turning now to Japanese patent 8-141001, from the English translation of that reference that was submitted, the reference discusses light-emitting diodes, but does not discuss utilizing generally bare semiconductor junctions mounted in the array. Furthermore, the clear lens layer 3 set forth by the Examiner is simply a lens that sits forwardly of the diode array, and does not contact the array to extend in a continuous fashion over all the dies of the array for protecting the bare semiconductor junctions. Accordingly, the Japanese 8-141001 reference also does not teach all the elements of the invention recited in independent claims 1, 8 and 9. As such, claim 1 is not anticipated under §102(b) over that reference. Furthermore, dependent claims 2-4 each depend from claim 1 and recite unique combinations of elements not taught or anticipated by JP 8-141001.

With respect to claim 8, that reference is rejected under §102(e) over Kennedy (U.S. Patent No. 5,634,711). Specifically, the Examiner refers to the embodiment shown in Figure 7 of Kennedy that discloses an element 136 that is an optical element, such as a TIR lens to collimate the light. However, like the lens of JP 8-141001, the element 136 as taught by Kennedy '711, does not contact the array to extend in a continuous fashion over all the dies of the array for protection of the bare

semiconductor junctions. Rather, the lens 136 is spread away from the array. To that end, the Kennedy reference also teaches traditional LEDs in a bullet shape, as shown in Figure 6 Item 22. There is no teaching in Kennedy of bare semiconductor junctions.

Accordingly, independent claim 8 is not anticipated by the Kennedy '711 reference under §102(e) because that cited reference does not teach each and every one of the elements as recited in claim 8. Again, the lens or cap 136 is simply a forward lens similar to that in JP 8-141001 for collimating the light, and is not taught to contact the array and protect the bare semiconductor junctions of the LED array. For similar reasons, independent claims 1 and 9 are also allowable over the Kennedy '711 reference.

SECTION 103 REJECTIONS

Claim 5 is rejected under §103(a) over both Kennedy '768 and JP 8-141001. For the reasons discussed herein above, claim 5, which depends from claim 1, is allowable over each of those references and, thus, dependent claim 5 is also allowable.

CONCLUSION

The Applicants submits that the currently pending claims are in an allowable form and, therefore, request an indication of such so that a Terminal Disclaimer might be filed at the Examiner's earliest convenience. If any issues remain in the case which might be handled in an expedited fashion, such as through a telephone call or an Examiner's Amendment, the Examiner is certainly encouraged to telephone the Applicant's representative or to issue an Examiner's Amendment.

The Applicants enclose a check for \$450.00 for a two-month extension of time to submit this Response herein. The Applicants know of no additional fees due herein with this submission. However, if any other charges or credits are necessary, please apply them to Deposit Account 23-3000.

Respectfully submitted,

WOOD, HERRON & EVANS, L.L.P.



Kurt A. Summe
Reg. No. 36,023

2700 Carew Tower
Cincinnati OH 45202
(513) 241-2324 (voice)
(513) 421-7269 (facsimile)